O'BRIEN et al Serial No. 09/043,406

Page 1, first line of text, before (numbered) line 4, insert:

#### -- RELATED APPLICATIONS

This is a continuation-in-part of our co-pending commonly assigned U.S. application Serial No. 08/695,528 filed 6 June 1996 (now abandoned) and a US national phase application under 35 U.S.C. § § 365 and 371 of PCT/GB97/00395 filed February 12, 1997 claiming priority from EP 96 300961.8 filed February 12, 1996; GB9602780.0 filed February 12, 1996 and GB 9607504.9 filed April 11, 1996.

### --BACKGROUND OF THE INVENTION

#### 1. Field of the Invention--.

Page 1, after line 5, insert:

--2. Related Art--.

Page 2, after line 7, insert:

#### --SUMMARY OF THE INVENTION--.

Page 9, before line 1, insert:

## --BRIEF DESCRIPTION OF THE DRAWINGS--.

Page 9, after line 17, insert:

## -- DETAILED DESCRIPTION OF EXEMPLARY EMBODIMENTS--.

Page 12, line 19, change "84, 85" to -54, 55--; and line 20, change "82" to -59--.

Page 29, line 1, change "CLAIMS" to

--WHAT IS CLAIMED IS:--.

# IN THE CLAIMS

Amend claims 1-27 as shown below:

1. (Amended) A service provisioning system for use in providing services in a distributed processing environment, said system comprising:

- 2 -

an input connected to a distributed processing environment for receiving a service

request from an entity;

a response output connected to said distributed processing environment for providing a response to the entity;

processing means to prodess the service request and provide a response thereto;

means to access an up-datable data store for storing parameter(s) indicative of the available capacity of the system to provide the service,

wherein the processing means is adapted to decide, [substantially on the basis of] based at least in part on data held in the data store, whether to provide a service, to propose conditions under which the system is willing to provide a service or to decline to provide a service.

- 2. (Amended) A system [according to] <u>as in</u> claim 1, said system further comprising means for scheduling tasks/resources to provide a service.
- 3. (Twice Amended) A system [according to] as in claim 1, said system further comprising means for scheduling a component service to provide a requested service

4. (Amended) A system according to [either one of claims 2 or 3,] <u>claim 2</u> wherein the processing means is adapted, in response to a failure by the scheduling means to schedule a task/resource or component service, to:

reschedule the task/resource/component service;

transmit a message to the entity that the originally requested service can only be provided under different conditions.

relocate the service with another service providing entity; or indicate to the entity that this service cannot be provided.

5. (Amended) A system [according to any one of the preceding claims,] as in claim 1 wherein the processing means is adapted, in response to the inability of a

that

resource or component service to be completed successfully, to:

reschedule the tasks/service;

transmit a message to the entity that the originally requested service can only be provided under different conditions;

relocate the service with another service providing entity; or indicate to the entity that the service cannot be provided.

6. (Twice Amended) A system [according to] as in claim 1, wherein the way in which the processing means is adapted to:

process a service request by accessing one or more parameters in the data store, processing the request using the one or more parameters, and producing a response at the output, which response is selected from indications

- a) sufficient capacity is available to provide the service;
- b) insufficient capacity is available to provide the service; and
- c) sufficient capacity is available to provide the service if modified, together with associated modifications.
- 7. (Amended) A system according to any one of the preceding claims,] as in claim 1 comprising a control output connected by said distributed processing environment to one or more tasks and/or resources required to provide the service.
- 8. (Amended) A system [according to as in claim 7, wherein the processing means is adapted to receive data from the tasks and/or resource(s) for use in updating the data store.
- 9. (Amended) A system [according to] <u>as in claim 8</u>, wherein said data includes task/resource performance and/or task/resource status data.

10. (Amended) A system [according to any one of the preceding claims,] as in claim 1 comprising a request output connected to said distributed processing environment for requesting a componer service from another entity.

11. (Amended) A service provisioning system, said system comprising:

programmed computer means for negotiating with another entity, in response to a request from said other entity, to provide a service, and

means for accessing one of more resources available for use by the system to provide a service,

said negotiating means including a data store containing data about said system relating to a measure of the current system capacity to provide a service, and being arranged to negotiate [substantially on the basis of] based at least in part on said data to provide a service in response to a request.

- 12. (Amended) A system [according to] as in claim 11, <u>further</u> comprising means to update said <u>data about said system [information]</u> on the basis of the past performance of the system.
- 13. (Twice Amended) A system [according to either] as in claim 11, <u>further</u> comprising means to schedule resource(s) for use by the system necessary to provide a service.
- 14. (Amended) A system [according to] as in claim 13, <u>further</u> comprising means to initiate the negotiating means to re-open negotiation with the entity which requested the service in the event one or more resources cannot be scheduled.
- 15. (Twice Amended) A system [according to <u>vas in</u> claim 1, arranged to provide more than one instance of a service, and/or of a negotiation for a service, to one or more requesting entities concurrently.

16. (Twice Amended) A system [according to] as in claim [1] 11, further comprising:

a data store containing data relating to the services offered by the system and to one or more entities which have an interest in receiving information relating to enactment of one or more of said services,

means to access said data store in response to a service request and establish that information should be transmitted to one or more of said entities and means to transmit said information to said entities.

- 17. (Amended) A system [according to] as in claim 16, wherein said means to transmit are operable in the absence of a specific request to transmit the information from the entities.
- 18. (Twice Amended) A distributed computing environment comprising plural systems as in [according to] connected by a communications network, wherein at least one of said systems is arranged to provide more than one instance of a service, or of a negotiation for a service, to one or more requesting systems concurrently.
- 19. (Amended) A distributed computing environment [according to] <u>as in</u> claim 18, wherein each of said systems is associated with [one of] a plurality of organisations, <u>each of said systems leaving a processing means and means to access stored parameters in the updatable data store in respect of each of its associated plurality of [said] organisations <u>so as to provide</u> [together defining] a virtual organisation.</u>
- 20. (Amended) A distributed computing environment [according to] <u>as in</u> claim 19, wherein the virtual organisation exists for a pre-determined period.
- 21. (Amended) A method of business process enactment, said method being implemented in a distributed computing environment including at least one service provider and at least one service requester, said [service provider] method comprising:

[an input to receive]

receiving a request at a service provider from [the or] any service requester within said environment,

[an output to provide] <u>outputting from said service provider</u> a response to said service requester [, processing means to process] <u>by processing</u> said request to determine the nature of said response, [means to access] <u>accessing</u> an up-datable data store [for] storing parameters indicative of the present capacity of the service provider to provide the service, and

[a control output to] <u>controlling</u> one or more resources in the environment available for use by said service provider, wherein the processing [means is adapted to] determines the nature of said response on the basis of the data stored in the data store.

A method [according to] as in claim 21, wherein, in the event a service provider and a service requester agree a contract to provide and accept a service respectively, a copy of the contract is stored as a data structure representing the terms and conditions of the contract by both the service-provider and the service requester.

23. (Amended) A service provision system for use in distributed processing environments, said system comprising:

an input for receiving a service request;

service request processing means for identifying component processes for use in provisioning the requested service;

negotiation means for use in establishing conditions applicable to provision of those component processes;

an up-datable data store;

means to access [an] <u>said</u> up-datable data store for storing <u>said</u> conditions when established; and

an output for providing a response to the service request, said response comprising an indication of availability of the requested service.

wherein the processing means is adapted to process a service request by accessing one or more of the <u>previously established</u> conditions in the data store, processing the request using the one or more <u>established</u> conditions, and producing said response.

24. (Amended) A-system [according to] as in Claim 23 wherein one or more of said established conditions has [may have] an associated expiry time for storage in the data store.

25. (Amended) A system [according to] as in Claim 24 wherein the processing means is adapted:

to detect an expired or [absent] <u>undefined</u> condition in the data store, which condition is applicable to a component process for the provision of a requested service, and

to trigger the negotiation means to establish a substitute condition.

26. (Twice Amended) A system [according to] as in claim 23 which further comprises initiation means to initiate one or more component processes in provision of a requested service.

27. (Amended) A system [according to] as an Claim 26, wherein:

provisioning a requested service requires provision of a selected set of component processes; [and wherein]

the negotiation means establishes and stores a set of conditions[,] applicable to provision of the component processes of the selected set[,]; and [wherein]

the processing means is adapted to process a service request by accessing the stored set of conditions in the data store, processing the request using said stored set, and producing said response.